

What is claimed:

1. A method of recycling process stream condensate from a steam reforming system that produces an uncontaminated superheated steam stream and at least one process condensate stream contaminated with products of a steam reformer of the steam reforming system, said method comprising:

collecting condensate from the at least one process condensate stream and forming a contaminated condensate stream therefrom;

pressurizing the contaminated condensate stream;

transferring heat from a first part of the uncontaminated superheated steam stream to the contaminated condensate stream, after having been pressurized, to form a contaminated superheated steam stream and to condense the first part of the uncontaminated superheated steam stream, thereby to form an uncontaminated condensate stream;

combining a second part of the uncontaminated superheated steam stream with the contaminated superheated steam stream to form a combined superheated steam stream;

recycling the uncontaminated condensate stream to the steam reforming system as make up for the uncontaminated superheated steam stream; and

using at least part of the combined superheated steam stream to form a hydrocarbon and steam containing process stream as a feed to the steam reformer.

2. The method of claim 1, further comprising stripping dissolved gases out of the at least one process condensate stream in a stripping column and collecting the condensate as a column bottoms of the stripping column.

3. The method of claim 1, wherein the process condensate is collected in a collection drum.

4. The method of claim 2 or claim 3, wherein heat is transferred from the first part of the uncontaminated superheated steam stream to the contaminated condensate stream, in sequence, in a process steam superheater, a boiler, and a condensate preheater so that the contaminated condensate stream is initially preheated in the condensate preheater, is boiled in the boiler, and is then superheated in the process steam superheater.

5. The method of claim 2 or claim 3, wherein heat is transferred from the first part of the uncontaminated superheated steam stream to the contaminated condensate stream in a single plate and frame heat exchanger.

6. The method of claim 4, wherein a third part of the uncontaminated superheated steam stream is exported.

7. The method of claim 5, wherein a third part of the uncontaminated superheated steam stream is exported.

8. The method of claim 1, further comprising collecting condensate from an external process condensate stream produced externally to the steam reformer and forming the contaminated condensate stream from the external process condensate stream and the at least one process condensate stream.